BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL
    Chairman
JIM IRVIN
    Commissioner
MARC SPITZER
    Commissioner

IN THE MATTER OF THE GENERIC
INVESTIGATION INTO U S WEST
COMMUNICATIONS, INC.'S COMPLIANCE
WITH CERTAIN WHOLESALE PRICING
REQUIREMENTS FOR UNBUNDLED
NETWORK ELEMENTS AND RESALE
DISCOUNTS.

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PHASE II

QWEST CORPORATION'S EXCEPTIONS TO THE ADMINISTRATIVE LAW JUDGES' RECOMMENDED OPINION AND ORDER

Qwest Corporation respectfully submits these Exceptions to the Recommended

Opinion and Order ("Recommendation" or "R.O.O.") of the Administrative Law Judges

in this proceeding.[1]

INTRODUCTION AND SUMMARY

The rates adopted for unbundled network elements ("UNEs") must comply with

the FCC's replacement cost methodology: "total element long-run incremental cost," or

"TELRIC." That methodology asks what it would cost to replace and operate the

network *today* using the most efficient technology that is reasonably available *now*,

taking as given both "the most basic geographical design of the existing network"[2] and

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[1] Exhibit A lists the challenged proposals of the ALJ Recommendation, the extent to which each understates cost, and Qwest's proposed resolution.

[2] Br. for Petitioners FCC and United States, *Verizon Communications Inc. v. FCC*, No. 00-511 and consolidated cases, at 9 (filed April 2001) ("FCC 2001 S. Ct. Br.").

the rest of the world outside the network. The ALJ pricing recommendation violates that standard at every turn. In addressing the costs of a replacement network, the ALJs' analysis simultaneously (1) lurches *back* in time to pre-development days, when streets were dirt, digging into them was relatively inexpensive, and other utilities supposedly shared the costs; (2) lurches *forward* in time to the unforeseeable future, when the technology is invented that allows CLECs and ILECs to solve complex network coordination problems with little or no human involvement; (3) oscillates *back and forth* in time by comparing old customer location data to new line count data as a means of reducing average loop costs; (4) ignores factors *outside* the existing network that should be taken into account, such as homes, office buildings, and other inconvenient obstructions; and (5) takes into account factors *within* the existing network that should be ignored, such as the ease of running cables through embedded Qwest conduit that would *itself* need to be replaced in the hypothetical replacement network.

The only common theme unifying this hodge-podge of TELRIC violations is that the result in each case is a material reduction both in Qwest's UNE rates and in the incentives of CLECs to invest in facilities of their own. To appreciate the aggregate impact of the ALJs' errors, this Commission need only compare the network element rates produced under the ALJs' scheme to the rates adopted elsewhere in Qwest's territory. On a geographically averaged basis, the *median* stand-alone loop rate in effect in the other thirteen Qwest states is $19.75; the rates in most of those states exceed $18.00, and the rates in the remaining states range from a low of $15.00 in Oregon to the

$17.87 Minnesota figure that AT&T itself has endorsed as pro-competitive.[3] The ALJ recommendation would turn Arizona's loop rate into a bizarre statistical outlier from this range. In AT&T's estimation, the ALJ recommendation would generate a loop rate of $12.13, nearly three dollars below the very lowest rate within Qwest's territory and nearly *eight* dollars below the median rate.[4] Indeed, even if this Commission were to agree with Qwest's view that the ALJ recommendation generates a somewhat higher rate of $14.54, the result would still depart dramatically from the norm across the other thirteen Qwest states.

These in-region rate comparisons indicate that there is something wrong with the ALJs' pricing methodology, and indeed there is. As noted, the ALJ recommendation would determine average loop costs *not* by considering the costs of a replacement network that could be feasibly deployed today in the real world using currently available technology, but on a fantastical network that could not be deployed today and that would ignore unavoidable constraints existing *outside* of Qwest's network. For example:

- The ALJ recommendation ignores Arizona's recent suburban growth by assuming that everyone in the state continues to live and work within the same distribution groups – *i.e.*, in the same places – as in 1997. The recommendation then compares that old 1997 data with *current* line count data to create an arbitrary reduction in the average loop rate.

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[3] *In the Matter of the Complaint of AT&T Communications of the Midwest, Inc. Against Qwest Corporation,* Minn. PUC Docket No. P-421/C-01-391 and OAH Docket No. 12-2500-14262-2, Transcript, July 27, 2001, at 1247-48 (AT&T witness Thomas Pelto testifies that the Minnesota pricing order, with its $17.87 figure, was "pretty good on pricing," such that AT&T could "do UNE-P").

[4] These and other rates are set forth in Exhibit B to this brief. The glaring discrepancy between the ALJs' recommended approach and the approach adopted in the other Qwest states cannot be explained by year-to-year cost reductions based on the varying times at which the rate proceedings in those states were completed: because loop costs are labor-intensive, the loop is *not* an element whose costs can be expected to decrease over time.

- The ALJ recommendation assumes that many of the roads in developed areas such as Phoenix and Tucson are dirt and then estimates digging costs on that basis.

- The ALJ recommendation assumes that, *every single time* Qwest places cables in the ground, *some other* utility will appear on the scene and agree to split the costs of trenching through earth or boring through asphalt so that it may deploy its own, unrelated facilities simultaneously. The result of that fantastical premise is an across-the-board 50% reduction in cable placement costs. In contrast, using more realistic assumptions, other states and the FCC have estimated significantly lower savings in the same contexts. Qwest's actual experience is that such sharing, even in undeveloped areas, reduces placement costs by 20% for buried cable (not in conduit) and 5% for underground cable (in conduit).

- Although the ALJ recommendation precludes reliance on the embedded network where the result would be *higher* rates, it nonetheless relies on the embedded network when doing so would produce *lower* rates. For example, the recommendation requires substantial reductions in loop costs by assuming that loops in the replacement network would be placed in existing, already-deployed underground conduit. That is a flagrant violation of *"total element long run incremental cost,"* a methodology that addresses the costs of replacing the network, not the costs of adding capacity to the existing network.

- The ALJ recommendation relies on a CLEC-proposed network routing design tool – "minimum spanning tree," or "MST" – that uses an abstract mathematical formula to minimize the distance for connecting points or customers. That formula (a) ignores various obstructions such as office buildings and residences; (b) assumes the availability of rights of way; (c) was never provided to Qwest for review or explained by any witness; and (d) has never been used by any company to design a network.

The ALJs' separate recommendation for certain key nonrecurring (one-time) charges is no less alarming than their recommendation for the monthly loop rate. One important category of nonrecurring charges involves the labor-intensive activities associated with providing an unbundled loop to a CLEC. Such loops can be provided in several different ways. If there is no need for time-sensitive coordination with the CLEC to avoid end user service outages, Qwest provides what is called a "basic loop installation," in which Qwest transfers a loop to the CLECs' collocated facilities on a flexible schedule. If, on the other hand, the end user currently receives service over the

loop in question and needs a quick, seamless transition between Qwest service and CLEC service, Qwest works closely with the CLEC to provide a "coordinated" loop cutover, also known as a "hot cut." A CLEC can order a hot cut either with or without labor-intensive testing by Qwest to ensure that the cutover has been effective.

For many nonrecurring charges, such as those for "hot cuts" (with or without testing) and for the provision of the UNE platform over lines *not* currently in use, the ALJs appear to have omitted any recommendation at all, notwithstanding the Commission's duty and intent to resolve all of the parties' disputes based upon the best available evidence. For others, the ALJs have recommended, for time-consuming network provisioning activities, nonrecurring charges that inexplicably approach zero.

One illustrative example is the proposed rate for the service of providing (without coordination) a basic loop installation to a CLEC. Even though it involves less coordination with CLECs than "hot cuts," the basic installation service almost always requires, among other labor-intensive steps, the manual intervention of a technician at the central office distribution frame to identify the relevant connections, disconnect the loop from Qwest's switch, and reroute it to the CLEC's collocated facilities. That explains why the existing rate for this service in Arizona is a non-recurring charge of $40-$45; why, with the FCC's endorsement, the nonrecurring charge for this service in Oklahoma is more than $60; and why, after an exhaustive TELRIC inquiry, the Colorado commission recently indicated that it would set the charge at $87.74. *See* p. 39 and note 28, *infra*. And, in this proceeding, Staff proposed rates of $58.18 (without testing) and $141.67 (with testing) for coordinated loop installations. In contrast, the ALJ recommendation would impose a trivial non-recurring charge of $1.70 for a basic loop

installation, thereby effectively denying Qwest *any* meaningful compensation for the inevitable costs of providing the service.

More generally, the ALJs' treatment of these and other costs illustrates a jarring paradox at the heart of their recommendation. At the same time that Qwest is expected to facilitate competition by making network elements available to CLECs, the ALJs would preclude recovery of the network costs that Qwest (or any other incumbent LEC) *must* incur to meet that obligation. For example, in denying Qwest recovery of any costs associated with the Interconnect Service Center, the ALJs would hold Qwest to a standard of perfection in processing orders while foreclosing recovery of the very real costs any efficient carrier would need to incur in providing service to wholesale customers today. Similarly, through what appears to be a basic accounting mistake, the ALJ recommendation would arbitrarily preclude recovery of half the costs of the general support assets – such as computers, trucks, and various work equipment – that are used in providing, and are attributable to, wholesale services for CLECs.

In sum, the ALJ recommendation repeatedly errs on the side of denying Qwest compensation for its forward-looking costs and of favoring CLEC UNE platform strategies over facilities-based competition. One possible explanation is that the analysis underlying the recommendation is not truly cost-based to begin with. Throughout this proceeding, the CLECs' overriding theme has been that UNE rates should be set low enough to allow them what they deem a sufficient margin to compete with retail services offered by Qwest and other carriers. Ex. Z-Tel-1 (Ford Direct) at 7-8; Ex. At&T/WorldCom-1 (Gillan Direct) at 8-9, 13-14. Their testimony and models are intended to "manipulate" costs to achieve that end. The ALJs do not dispute having

bought into this approach. Although the recommendation recites the statutory cost requirement, it expressly relies on existing "retail" rates "as a measure of whether the proposed UNE prices fall within a range of reasonableness." R.O.O. 62. The ALJs thus have proposed non-compensatory rates for Qwest to ensure a profit margin for CLECs that, in their view, suffices to induce them to use the UNE platform to offer retail services to residential customers.

This is lawless on several levels. First, as the FCC has repeatedly confirmed, the appropriate statutory inquiry is "whether the rates are cost-based, not whether a competitor can make a profit by entering the market."[5] The FCC reaffirmed that holding only last month.[6] That is because cost-based rates are designed to promote efficient innovation and investment, whereas below-cost rates discourage investment (by both ILECs and CLECs) and ultimately lead to substandard services for consumers.

Second, precisely because the Act specifies "cost" as the basis for UNE prices, the platform has always been viewed as an effective entry vehicle only for customers that would otherwise pay rates *at or above cost*. A cost-based platform is neither designed nor expected to help CLECs recruit customers whom an incumbent LEC serves at *below-cost* rates through various subsidy mechanisms. Many, though not all, residential customers fall into that category. For those customers, Congress gave CLECs a separate entry option with a different pricing scheme: resale of an incumbent LEC's existing

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[5] *Joint Application by SBC Communications Inc., et al., for Provision of In-Region, InterLATA Services in Kansas and Oklahoma,* Memorandum Opinion and Order, 16 FCC Rcd 6237 at ¶ 92 (2001) ("*KS/OK 271 Order*").

[6] *Joint Application by SBC Communications Inc., et al., to Provide In-Region, InterLATA Services in Arkansas and Missouri,* CC Docket No. 01-194, Memorandum Opinion and Order, FCC 01-338 at ¶ 65 (rel. Nov. 16, 2001) ("*Ark/MO 271 Order*").

retail services, for which the incumbent is paid its retail rate minus avoided retail costs, thereby guaranteeing CLECs a margin on sales to those customers. *See* 47 U.S.C. § 251(c)(4). As the FCC has explained, "the different pricing regimes for these two entry options ensure that resale will be a more attractive entry option than network elements" for such customers.[7] Finally, even if it were lawful and otherwise appropriate to price network elements to encourage greater residential competition through the UNE platform – which it is not – the Commission could in fact achieve that objective by setting an average loop rate at $18, as explained in Exhibit C. Indeed, competition is thriving in New York even though the UNE rates in that state, endorsed by the FCC as consistent with TELRIC, are among the highest in the nation.[8]

In reality, however, most of the CLECs in this proceeding are unlikely to compete broadly for residential customers. They are more likely to exploit non-compensatory UNE rates simply to attract more business customers and increase their returns in the process. At least three unfortunate consequences would follow from granting that request, which is now embodied in the ALJ recommendation. *First,* there would be a marked reduction in universal service subsidies currently derived from business customers, which would require the Commission either to revise its universal service objectives or replace those subsidies through some other mechanism. *Second,* a reasonable decisionmaker in Qwest's position would have no alternative but to reduce its

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[7] Reply Br. for Petitioners FCC and United States, *FCC v. Iowa Utils. Bd.*, S. Ct. No. 97-826 and consolidated cases, at 40 n.27 (filed June 1998).

[8] *See generally Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act to Provide In-Region, InterLATA Service in the State of New York,* Memorandum Opinion and Order, 15 FCC Rcd 3953 (1999) ("*NY 271 Order*"), *aff'd, AT&T Corp. v. FCC,* 220 F. 3d 607 (D.C. Cir. 2000).

workforce and investment in Arizona to conform to Arizona's new conception of the costs that should be incurred by efficient carriers. Such reductions would significantly impair the quality and timeliness of service provided to retail and wholesale Arizona customers.

Third, as one prominent industry analyst recently observed, when "Government set[s] wholesale local prices below real cost," as it is increasingly tempted to do, it "poison[s] prospects for economically sound facilities investment" and "contribute[s] to the destruction of companies, jobs, and shareholder wealth by discouraging economic investment and rewarding uneconomic investment."[9] All of these concerns underscore the ultimate paradox in this proceeding: the ALJs' proposal for radically reduced UNE prices would end up harming the very individuals – consumers – whom it is ostensibly designed to benefit.

Although the ALJ recommendation contains a broad range of consequential errors, Qwest has limited its challenge in these Exceptions to only the most egregious of those errors. Correcting the loop-related errors discussed below would produce a monthly loop rate in the neighborhood of $19.00, a figure still below the median in-region rate of $19.75 discussed above. With respect to non-recurring charges, Qwest likewise asks that the Commission allow it to recover the costs that an efficient carrier must incur in making network elements available to other carriers. In particular, the Commission should adopt nonrecurring charges similar to those proposed by Qwest and, at a minimum, treat as an absolute floor Staff's recommendations on those nonrecurring

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[9] Scott C. Cleland, "Why De-Regulation Is Now The Dominant Telecom Trend/Theme," Precursor Group Independent Research (Nov. 28, 2001).

charges that Staff addressed. *See* Exhibit G. Finally, the Commission should reject the ALJs' recommendation on campus wiring, which is outside the scope of this proceeding, and for which there is absolutely no record support.

ARGUMENT

I. The ALJ Recommendation For The Loop Is Riddled With Basic Methodological Errors

As the FCC recently explained, the "essential objective" of TELRIC "is to determine what it would cost, in today's market, to replace the functions of [a network] asset that make it useful," while simultaneously taking as given "the most basic geographical design of the existing network." FCC 2001 S. Ct. Br. at 6, 9. The point of TELRIC is not to imagine that the *world itself* will be recreated from the void with an eye towards lowering telecommunications costs. Nor is it the point of TELRIC to imagine futuristic technological capabilities that exist only on chalkboards and not on the market.

Instead, TELRIC asks what facilities would be "*currently* available," 47 C.F.R. § 51.505(b)(1) (emphasis added), to an efficient carrier seeking to replace the existing network given the constraints of the rest of the world. The "current availability" of such facilities is integral to the basic purpose of TELRIC, which is to "replicate[], to the extent possible, the conditions of a competitive market." *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, First Report and Order, 11 FCC Rcd 15499, 15846 ¶ 679 (1996) ("*Local Competition Order*"). By replicating those conditions, TELRIC is meant to give CLECs appropriate price signals about when it would be efficient, and when inefficient, to build their own facilities rather than leasing the incumbents' existing capacity. *See id.* at 15813 ¶ 620, 15848-49 ¶¶ 683-85.

The Act's objective, at the end of the day, is true facilities-based competition; Congress did not intend, in enacting the 1996 Act, to create a regime in which all carriers use exactly the same network and compete about nothing but marketing and salesmanship. As the FCC recently observed, "[t]hrough its experience over the last five years in implementing the 1996 Act, the Commission has learned that only by encouraging competitive LECs to build their own facilities or migrate toward facilities-based entry will real and long-lasting competition take root in the local market."[10] That is why, in applying TELRIC, it is so critical to set UNE prices based on "currently available" technology and on current constraints in the rest of the world outside the network. If regulators were to move the inquiry forward or back in time in an effort to reduce estimated replacement costs, they would severely distort the price signals TELRIC is designed to send and would undermine any incentive a CLEC might have to invest in facilities of its own. No carrier would ever build facilities at today's rates, with the constraints of today's world, if it could instead lease facilities at rates reflecting the lower costs of yesterday or tomorrow.

Much of the ALJ recommendation violates these principles in one respect or another. To keep this proceeding focused, however, Qwest has confined its challenge in these Exceptions to the most flagrant respects in which the recommendation understates,

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[10] *Deployment of Wireline Services Offering Advanced Telecommunications Capability,* Fourth Report and Order, 16 FCC Rcd 15435, 15437 ¶ 4 (2001); *see also Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers,* Notice of Proposed Rulemaking, CC Docket No. 01-339, et al., FCC 01-361, Separate Statement of Chairman Michael K. Powell at 2 (adopted Dec. 12, 2001) (stressing FCC's "ongoing commitment to the promotion of facilities-based competition").

or simply ignores, significant and unavoidable costs. With respect to the loop, these include, among others, the ALJs' assumptions

- that there has been no geographic expansion of homes and businesses in Arizona since 1997;

- that Arizona has no houses, yards, office buildings, or right-of-way restrictions that could interfere with the easy deployment of telephone lines;

- that every time a carrier places facilities in the ground, some other utility will appear on the scene to split the placement costs down the middle;

- that paved roads should be treated as unpaved to minimize the costs of laying cable; and

- that the ease of pulling new cable through Qwest's "existing underground conduit" should be taken into account even though that conduit would itself not exist in the replacement network contemplated by TELRIC.

Each of these methodological lapses has a material impact on the monthly loop rate; in the aggregate, that impact is staggering. If these and the other errors discussed below are corrected, the result would be a monthly loop rate in the neighborhood of $19.00, which would still fall below the median recurring charge for the loop in Qwest's territory. *See* Exhibit B, D, *infra*.

A. **The ALJs' Treatment Of Customer Location And Line Count Data Is Unsupportable and Violates TELRIC**

1. **The ALJs' Loop Recommendation Assumes That There Has Been No Geographic Expansion Of Developed Areas Since 1997**

As AT&T's own witness acknowledged in this proceeding, Arizona "is one of the fastest-growing states in the nation." Tr. 1383 (Denney Cross). That fact enormously magnifies the cost understatement caused by a crude modeling shortcut proposed by AT&T and adopted by the ALJs. That shortcut, although inconsistent with TELRIC, might not have mattered in the lower-growth states where AT&T proposes the same

approach, but it matters a great deal in a high-growth state like Arizona. On this one

input issue alone, by accepting AT&T's approach, the ALJs have underestimated the

monthly loop cost by approximately $1.29 by assuming that Arizonans live and work in

exactly the same geographical areas today as in 1997.

Generally speaking, the average TELRIC-based investment for a loop equals (a)

the total forward-looking loop investment within a given area divided by (b) the number

of working lines within that area (the "line count"). The role of the denominator in that

equation is straightforward: as the line count goes up, using it to divide up total loop

investment on a line-by-line basis causes the cost of the *average* line to go down

proportionately. The numerator – the total loop investment – is more complex. It is a

function of (among other inputs discussed below) the geographic dispersal of customer

locations. A simple example illustrates that point: because of economies of density, it is

much cheaper to deploy 10,000 loops to one location than 100 loops to each of 100

different locations. All else remaining the same, every increase in the size of the

geographic area to be served raises the total loop investment – and thus raises the average

loop cost as well.

This approach to calculating average loop costs produces a meaningful result only

if the geographic customer location data correspond in time to the loop count. For

example, it would improperly inflate the average loop cost to take recent suburban

growth into account in calculating total loop investment but then divide that total

investment figure by a line count taken *before* the suburban growth even occurred: the

line count figure, the denominator, would be incongruously small when used to divide up

total investment. By the same token, it would improperly *deflate* the average loop cost to

ignore recent suburban growth in calculating total loop investment but then divide that investment figure by a line count taken *after* such growth had occurred. No rational calculation of average loop cost could rest on such a critical blunder.

The ALJ recommendation, however, rests on precisely that blunder. It is undisputed that the HAI cost model, which the recommendation adopts, uses customer location data *from 1997* for purposes of establishing total loop investment and then divides that investment figure by a line count *taken in December 2000*. Tr. 1380 (Denney Cross). The problem is that the line count in 2000 exceeds the line count in 1997 by approximately 500,000 working lines, or some 20%. Tr. 1380, 1389 (Denney Cross). The result of this apples-and-oranges comparison is a substantial, and wholly contrived, reduction in the average loop cost.[11] AT&T acknowledges that all those extra lines must be used to serve actual customers, but, to paper over the problem, it manipulates the cost model to assume that all of those customers live and work in *exactly the same places* as the customer locations identified in 1997. Tr. 1390-91 (Denney Cross). AT&T effectively argues, and the ALJs agree, that there has been no geographical expansion in Arizona's business or residential communities since 1997.

This is absurd, and quite materially so. New developments and communities have sprung up throughout the state, including, for example, in North Phoenix, Scottsdale,

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[11] The 1997 customer location information used in the ALJs' choice of cost model has never been verified, because the vendor that provided the information considers it highly proprietary. Tr. 1373-76 (Denney Cross). Indeed, even AT&T and WorldCom – the sponsors of the HAI model – have never seen or audited the underlying data. *Id.* Although Qwest emphasized the unfairness of using such a model in this proceeding, the ALJs' analysis altogether ignores the issue. The ALJs' forgiving approach to proprietary information in that context stands in curious contrast to their criticism of Qwest (R.O.O. 24) for proposing the use of proprietary line count data, even though, unlike the customer location data, the line count data were made available to the parties in this proceeding.

Anthem, Peoria, Buckeye, and areas east of Apache Junction in Metropolitan Phoenix. That expansion is largely responsible for the 20 percent increase in Qwest's line counts since 1997. Serving these new communities requires massive investment in new distribution plant and other telecommunications facilities, particularly since new developments are typically farthest from Qwest's central offices – the location of which is assumed under TELRIC – and are therefore unusually expensive to serve. Tr. 237 (Buckley Redir.). But, by accepting AT&T's model, the ALJ recommendation assumes all that investment away on the theory that Arizonans live and work today in exactly the same places as in 1997. *See* Tr. 1381-91 (Denney Cross). Indeed, the problem is even worse than that. While the geographic reach of the real telephone network has dramatically expanded since 1997, Tr. 1386, 1390-91 (Denney Cross), in some of the fastest-growing areas in Arizona, the reach of the hypothetical network generated by the succeeding versions of the HAI cost model over the same period has actually shrunk.[12]

Correcting this error has significant consequences for the average loop cost. The record does not contain *direct* customer location evidence from the recent past that could be paired with the December 2000 line count figure. Nonetheless, it is both feasible and appropriate to bring the 1997 customer location information up to date by assuming a geographic expansion of the customer service area proportionate to the increase in the line count figure. At the same time, to reach a true apples-to-apples comparison, the

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[12] In contrast, in addressing distribution plant, Qwest's alternative loop cost model ("LoopMod") uses a fundamentally different approach that increases the size of the distribution area being served by an amount proportionate to an increase in the number of lines. Put differently, any growth in first lines would produce a corresponding growth in the area being served. Altering the year in which a line count is taken would therefore not produce distortions such as those presented here. *See generally* Tr. 236-37.

Commission should simultaneously take into account (to the CLECs' benefit) the growth

in the percentage of second lines since 1997, whose deployment involves much lower

costs than does the deployment of first lines to new locations. If these adjustments are

made, the result would be an increase in net per-loop investment of $60.00 and an

increase in the average monthly loop rate of $1.29.[13]

2. The ALJs' Treatment Of Digital Lines For Line-Count Purposes Is Irrational and Violates TELRIC.

The Commission should also reject the ALJs' illogical recommendation

concerning the treatment of high capacity loops for line-count purposes. High capacity

lines, such as DS1s and DS3s, use special electronics to carry many different

transmission "channels" over a very small number of physical cables. The only reason to

consider high-capacity loops at all *in estimating the cost of ordinary narrowband loops* is

the possibility that there may be some economies of scale associated with placing the

cables for DS1 and DS3 circuits at the same time as cables for narrowband loops. That

impact varies with the number of *physical* DS1 and DS3 cables that cover the same

routes as narrowband loops. Including only those physical cables within the line count

thus captures any economies of scale that result from placing special access lines.

Early versions of the HAI model ignored that fact and treated DS1 and DS3 lines

on a "channel-equivalent" basis: *e.g.*, as though a DS1 line were composed of 24

separate loops for line count purposes. In subsequent versions of the model, the model's

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[13] Any given input-related rate adjustment discussed in these Exceptions will vary somewhat depending on the adjustments this Commission makes to the ALJs' recommendation for the *other* inputs for the same element. Qwest's analysis of the rate impact of various methodological corrections is set forth in Exhibit D. (With the exception of the MST issue, discussed in section I B, below, the adjustment figures discussed in these Exceptions are principally keyed to Option One in that Exhibit.)

sponsors have partially corrected this error and treated access lines on a physical-pair

basis. Tr. 1403-04 (Denney Cross). But the correction is incomplete: the CLECs' run of

the HAI model in this case still includes some digital business lines (such as those used

for ISDN Primary Rate service) on a channel-equivalent basis. Ex. Qwest-29

(Fitzsimmons Reb.) at 40-41.

There is, however, no conceivable reason for treating business access lines on a

channel-equivalent basis while treating all other access lines on a physical-pair basis.

Indeed, *no one even disputes this point*, which was altogether ignored by the ALJs. As

the CLEC's own witness confirmed, the decision to correct the HAI model's treatment of

access lines largely reflected the fact that the installation of a DS1, for example, involves

placing only two physical pairs in the ground, not 24 pairs. Tr. 1404 (Denney Cross).

The same witness agreed that treating all business access lines on a pair-equivalent basis,

as Qwest proposes, "would be consistent with what [was done] with the special access

lines," *id.* at 1408 (Denney Cross), and he was unable to articulate any coherent basis for

distinguishing among such lines for these purposes. The issue is as straightforward as

that. Nowhere in their opaque discussion of this issue (R.O.O. 23-24) do the ALJs cite

any basis for ignoring the flagrant illogic of treating business access lines differently

from all other access lines for line-count purposes.[14] Treating them the *same* would

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[14] The ALJs appear to have relied (R.O.O. 23-24 & n.10) on the FCC's approach to
similar issues in a completely different context: in developing a cost model, not for
purposes of determining UNE rates, but for purposes of determining the relative
allocation of universal service funds among states. *See* Tenth Report and Order, *Federal-State Joint Board on Universal Service*, 14 FCC Rcd 20156 ¶ 100 (1999) ("*Inputs Order*"), *aff'd sub nom. Qwest Corp. v. FCC*, 258 F.3d 1191 (10th Cir. 2001). Even if it
were appropriate in a UNE rate proceeding to consider how the FCC has addressed an
issue for *those* purposes (which it is not, as discussed in Section I(B) below), the internal

recognize an increase in the loop investment per line of $21.00 and an increase in the per

month loop cost of $0.58. *See* Exhibit D.

B.   **The ALJs' Model Understates Loop Investment and Violates TELRIC By Assuming That Arizona Lacks Inconvenient Obstructions That Would Interfere With Efficient Network Design by New Entrants**

The HAI model uses a conventional "backbone-and-branch" program as its

default mechanism for mapping out the architecture of the hypothetical replacement

network, and the routes chosen under that mechanism determine the total distribution

facilities needed to connect switches to customer locations. For example, the distribution

lines created by a backbone-and-branch program follow streets, just as in the real world;

they do not pass through office buildings, people's backyards, or other obstacles that

might stand in the way of what would otherwise be the most convenient route between

two points. The ALJs, however, declined to use the HAI model's default backbone-and-

branch mechanism. Instead, they compounded the consequences of their separate

customer-location error by turning on an optional mapping algorithm added to the HAI

model called "minimum spanning tree," or "MST." R.O.O. 22. As discussed below, that

exercise in abstract "graph theory" understates loop investment costs by assuming away

inconvenient obstacles -- such as buildings, parks, and right-of-way restrictions -- that

might cause additional costs to be incurred. It also flies in the face of TELRIC, which, as

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workings of the FCC's universal service cost model would still be irrelevant here:
Because the *HAI model* has already been revised (correctly) to treat all access lines on a
physical-pair basis, it would make no sense to carve out an arbitrary exception to that
approach for business access lines. Finally, whatever advantage there may be in relying
on "publicly available data and information" (R.O.O. 24), that explanation cannot justify
this exercise in arbitrariness, particularly given that Qwest shared the relevant data with
the other parties to this proceeding.

discussed, holds the rest of the world constant while inquiring into the costs of a replacement network.

One of the key steps in determining total loop investment (the numerator in the equation discussed in Section I(A)(1) above) is a calculation of the amount of "distribution plant" needed to reach individual customers. A distribution facility is the final portion of the loop closest to the customer: the so-called "last mile to the home" (although such facilities may of course be longer or shorter than a mile). Like the outer branches on a tree, they are the most geographically dispersed of the loop facilities, and their deployment requires enormous investment. The degree of that investment depends on several key factors, one of which is the extent to which various obstructions in the real world get in the way of otherwise efficient network distribution paths.

By turning the MST function on, the ALJs effectively eliminated that cost factor from consideration. MST uses an abstract mathematical algorithm to estimate the distances required to connect customer locations as if they were dots on a blank page. It is not a method that any telecommunications engineer would ever use to design a distribution network. In the real world, customers are not dots on a blank page, and distribution networks must be designed around rivers, buildings, yards, highways, protected lands, and other natural and man-made obstructions. *See* Exh. H. By ignoring such obstructions, the HAI model's MST estimates for distribution distances in urban areas are systematically lower than the distances actually required to connect flesh-and-blood customers. Ex. Qwest-29 (Fitzsimmons Reb.) at 35-36.

The ALJ recommendation completely ignores this fundamental flaw in the single paragraph that it devotes to endorsing the MST function. R.O.O. 21-22. The

recommendation obliquely speculates that MST's other characteristics, such as the model's assumptions about "spacing of customer locations along roads," might offset the impact of its failure to take obstacles into account. R.O.O. 22. This is nonsense. To begin with, modeling would be a meaningless exercise if serious errors were permitted to distort the modeling process whenever someone speculates that other errors "offset" the effect of the initial errors to some unknown extent. In any event, the ALJs cite no basis for speculating that the MST's function's error in ignoring real-world obstacles is in fact offset by other errors. The evidence in the record, taken from a Minnesota cost proceeding, is precisely to the contrary. That evidence shows that the MST approach dramatically understates the amount of distribution that is needed to serve customers, from roughly 20% in rural areas to as much as 50% in downtown urban areas, where there are more buildings and other obstructions. Ex. Qwest-29 (Fitzsimmons Reb.) at 38-39; Ex. H. Because CLECs are most interested in expanding their customer base in those latter locations, the use of MST significantly undercompensates Qwest, treats CLECs to a substantial windfall, and signals to others that it would be cheaper to lease loops at these below-cost rates than to deploy their own facilities. *Id.*

The CLECs have argued, and the ALJs appeared to agree (R.O.O. 21), that the FCC's use of a similar function within the FCC's universal service cost model somehow supports the use of MST within the HAI model for the quite different purpose of estimating UNE costs. That argument is wrong. The FCC has emphasized that its modeling assumptions for universal service purposes "may not be appropriate to use" in "determining prices for unbundled network elements," and it has specifically "caution[ed] parties from making any claims in other proceedings based upon the input

values we adopt" in the universal service setting. *Inputs Order* at ¶¶ 31 n.66, 32; *accord*

New York 271 Order at ¶ 245. In fact, as the FCC has observed, any given significant

error in its universal service cost model may well have no material effect on the output of

that model, the limited purpose of which is to address the relative allocation of federal

universal service funds among states.[15] In contrast, the same error, used within a

different model designed to set individual UNE rates, may have enormous consequences.

There are two alternatives for dealing with the ALJs' startling mismatch between

(1) basing the size of the service area based on 1997 locations and (2) using customer line

counts not from 1997, but 2000. The first alternative, discussed in Section I(A)(1) above,

is to increase the size of the service area in proportion to the increase in the number of

lines. The second alternative, as discussed in this section, is to turn the MST function off.

That would result in a backbone-and-branch distribution design that is somewhat closer

to the real world as it exists today. If the Commission were to choose the second

alternative rather than the first (*i.e.*, if the customer location error discussed in Section

I(A)(1) is left uncorrected), disengaging the MST function would increase the HAI

model's per line loop investment by $44.00 and the per month unbundled loop cost by

$0.93. *See* Exhibit D at p. 2.

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[15] *See* Br. for Respondents FCC and United States, *GTE Serv. Corp. et al. v. FCC*, No. 99-1244, at 27 (filed Oct. 4, 2000), *petition for certiorari dismissed,* 531 U.S. 975 (2000); *see generally* Ninth Report and Order, *Federal-State Joint Board on Universal Service,* 14 FCC Rcd. 20432 (1999), *rev'd sub nom. Qwest Corp. v. FCC*, 258 F.3d 1191 (10th Cir. 2001).

C. **In Determining Placement Costs And Cost Sharing Percentages, The ALJs Improperly *Ignore* Current Conditions *Outside* The Network And Improperly *Consider* Embedded Facilities *Inside* The Network.**

Another key factor in determining total loop investment is the forward-looking cost of physically laying the cable that constitutes the replacement network. As discussed above, TELRIC requires a calculation of what it would cost an efficient carrier to do the work necessary to replace *all* existing network facilities, while holding constant (1) "the most basic geographical design of the existing network" (FCC 2001 S. Ct. Br. at 9), and (2) the world as it exists outside of the network *today* (*id.* at 6). In addressing the costs of placing cable ("placement costs") and the savings a carrier could enjoy by sharing those costs with other utilities ("structure sharing"), the ALJs violated TELRIC principles in two strikingly contradictory ways. First, the ALJs' analysis *takes for granted* the continued existence of facilities a proper TELRIC inquiry would ignore: specifically, embedded Qwest facilities ("existing underground conduits") whose presumed availability would assertedly slash the costs of laying cable in the supposed "replacement" network. R.O.O. 12. Second, the ALJs' analysis *ignores* the continued existence of matters a proper TELRIC inquiry must take into account: the rest of the world outside of the telecommunications network as it exists today. As with the ALJ's other errors, the only common theme joining these blatant deviations from TELRIC is that, in each case, the recommended loop rate goes down.

1. **Structure sharing.**

"Cable placement costs" are the costs of placing telephone cable in the ground or on poles. These costs, along with the costs of splicing and other labor-related activities, are the largest component of outside plant costs. On average, more than 60% of Qwest's

total investment in buried cable is related to the cost of placing cable. Ex. Qwest-1 (Buckley Dir.) at 11. One question considered in a TELRIC analysis is how much, if anything, an efficient carrier rebuilding the network today would be able to save on placement costs by sharing them with other utilities (such as electric utilities or cable companies) that might wish to dig up the ground and lay facilities of their own at the same time.

The ALJ recommendation supposes that an efficient carrier in Qwest's position would enjoy across-the-board savings of 50% by sharing 100% of the time. R.O.O. 14. Put differently, the ALJs submit that *every time* the carrier incurs the significant costs of digging into the earth to lay its cable, some other utility will appear on the scene and agree to split those costs down the middle. Ironically, although the ALJs rely on passages in the FCC's universal service cost model, their ultimate 50% savings assumption significantly exceeds, in every density zone, the savings assumptions in that FCC model for buried and underground cable. That model assumes savings of 0% to 35%, except in the very highest density zones, where the savings assumption is 45%. *Inputs Order* ¶ 243. The savings assumptions adopted in the other Qwest states, set forth in Exhibit E, are generally at or below those same levels.[16]

It should come as no surprise, therefore, that the ALJs' inflated numbers arise from a gross misapplication of TELRIC. To begin with, the ALJs did *not* ask, as

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[16] These Exceptions refer to "savings" percentages simply for ease of exposition. The flip side of a "savings" percentage is the percentage of costs that a carrier is assumed to cover itself. Thus, if the former figure is 20%, the latter will be 80%. As a technical matter, the latter figure is the one that is plugged into the HAI model as an input. It is therefore important that, in adopting an appropriate structure sharing number, the Commission specify that it is using that latter figure (the percentage of costs a carrier is assumed to cover) rather than the former (the savings percentages due to sharing).

TELRIC requires, how much structure sharing a carrier could expect if it were to deploy a replacement network in the world as it exists today. Sharing opportunities are quite limited in developed areas, because the utilities that might otherwise have an interest in finding such opportunities have already deployed most of their underground facilities in those areas. Ex. Qwest-1 (Buckley Dir.) at 24-27. To get around this problem, the ALJs asked instead how much sharing a carrier could have hoped for *years ago*, in the conditions that "existed when the [embedded] plant was built" – *i.e.*, when today's real estate developments were first under construction, when "a significant amount of developer-provided trench" was supposedly available, and when other utilities were *not* "already in place." R.O.O. 13-14.[17]

TELRIC, however, is not a time machine. As the FCC recently explained, "[t]he essential objective" of TELRIC or any other forward-looking cost methodology "is to determine what it would cost, *in today's market*, to replace the functions of an asset that make it useful." FCC 2001 S. Ct. Br. at 6 (emphasis added). The ALJs' approach was not forward-looking, but *backward*-looking, and as such it is the very antithesis of TELRIC. Indeed, if TELRIC permitted this retrospective analysis, a CLEC would never have any incentive to build its own facilities, because it could always take advantage of

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[17] To support the proposition that such time travel is permissible, the ALJ recommendation refers indirectly (R.O.O. 13) to a sentence in a footnote of the FCC's *Inputs Order* (14 FCC Rcd. at 20261 ¶ 244 n.504). Even if it were appropriate to rely on the FCC's universal service methodology to set UNE rates, which it is not (see Section I(B), *supra*), the cited footnote would still not support the ALJ recommendation. The FCC questioned the relevance of the before-and-after issue to its inquiry, noting that, "[w]hile this [issue] may provide an interesting topic for academic debate, we do not believe it to be particularly useful or relevant in determining the structure sharing values in this proceeding." And, as noted in the text, the bottom line savings percentages the FCC ultimately adopted in the *Inputs Order* are significantly lower than those proposed in the ALJ recommendation.

the lower costs incurred in the old days when, according to the legend, the digging was easy and everyone shared. Finally, as discussed below, that legend is quite false in any event.

The ALJs ignored several other critical barriers to sharing as well. First, as the CLECs' own expert acknowledged, utility companies "typically" place their facilities "at totally different times." Tr. 1623-24 (Weiss Redir.). Second, as the same witness conceded and as AT&T's engineering handbook makes clear, concerns about electromagnetic coupling make joint placement with power companies appropriate "only for distribution cables and service wire, not for feeder or trunk cables." Tr. 1554 (Weiss Cross); Ex. Qwest-33 (AT&T Handbook).[18] Finally, and most fundamentally, certain placement techniques – such as simple plowing, the most frequently used method of laying cable – are not even amenable to the simultaneous placement of multiple cables. Ex. Qwest-23 (Overton Dir.) at 11. Of itself, that fact refutes the ALJs' proposed cable-sharing numbers, and it also underscores a curious tension in their analysis. Plowing precludes sharing, and that has the effect of *raising* average loop costs. But, as an absolute matter, plowing is also *cheaper* than other placement methods. Unsurprisingly, although the ALJs exaggerate the availability of plowing when doing so would produce

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[18] To the uncertain extent that the ALJs based their recommendation on the assumption that a carrier could share costs *with other carriers*, reliance on that consideration would contradict a bedrock assumption of the ALJs' own cost model. In determining loop investment costs, that model presupposes the large economies of scale enjoyed by a carrier that serves all customers within a given calling area, rather than the much smaller economies of scale that would be enjoyed by several carriers sharing those customers. If one carrier "were able to coordinate its activities with two other firms, such that there would be at least three local service providers in each trench," that carrier "would not achieve anything like the economies of scale assumed" by the cost model adopted by the ALJs. Ex. Qwest-29 (FitzSimmons Rebut.) at 46. "Even in the hypothetical world of TELRIC, you cannot have it both ways." *Id.*.

lower placement costs (*see* Section I(C)(2), *infra*), they ignore the consequence of that exaggeration when adopting high sharing assumptions.

In any event, in the real world, "Qwest has been able to share trench" only "for approximately 18% of the buried sheath footage placed." Ex. Qwest-1 (Buckley Dir.) at 27. Even that figure overstates the level of sharing in a replacement network, because it typically reflects placement activities only in growth environments, where other utilities have not already placed all of their own facilities and where developer-provided trenches are often available. *See id.*; Tr. 888, 915-16 (Torrence Sum., Torrence Cross); *see also* Ex. Qwest-25, Qwest Response to AT&T Data Request No. 70; Tr. 944-47 (Torrence Redir.). Thus, if it *were* appropriate to substitute a backward-looking methodology to determine how much sharing was possible when currently developed areas were undeveloped, even the evidence on that issue would not begin to support the ALJs' proposed 50% sharing numbers.

Qwest, of course, has every incentive to find ways to reduce costs by sharing them with other companies, and its experience is similar to that of any other efficient carrier. The problem is not that Qwest wantonly wastes its own money, but that limited sharing opportunities are available to any carrier when placing network facilities, particularly in developed areas. For their part, the CLECs introduced no evidence in the record about the extent to which *they* have been able to find and exploit sharing opportunities, an omission that speaks volumes about their substantive position.[19]

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[19] After the record closed, it came to Qwest's attention that, in placing its underground power facilities, Arizona Public Service ("APS") is able to share trenching costs with other utilities only approximately 25%-30% of the time.

In sum, this Commission should adopt sharing percentages that correspond not to the ALJs' backward-looking model (which manages to misrepresent even the historical data), but to the conditions an actual carrier faces in today's market. It should therefore adopt savings percentages similar to Qwest's; in no event could the Commission justify the use of figures higher than those adopted by the FCC in its universal service cost model and by other states in Qwest's territory. *See* pp. 20-21, *supra*; Exhibit E, *infra*. Using the FCC percentages as inputs in the HAI model would recognize additional per loop investment of $60.00 and permit the recovery in the monthly loop rate of an additional $1.04 in costs. *See* Ex. D.

2. Cable Placement Costs.

The next input the ALJs distorted is the underlying *magnitude* of the cable placement costs themselves (*i.e.,* whether or not shared with other utilities). As the ALJs found, if an efficient carrier were to replace Qwest's network today, it would need to place the vast majority of cable – some 81% – beneath the ground rather than in the air on telephone poles. R.O.O. 15. The basic dispute about cable placement costs concerns the relative frequency among the more and less expensive methods that such a carrier would use to cut through the ground to lay the cable. In finding that less expensive methods would predominate even in developed areas, the ALJs essentially assumed, first, that paved roads are unpaved and, second, that Qwest's "existing underground conduit" is somehow relevant to the TELRIC-based costs of replacing the entire network, *including that very conduit.* Each of those assumptions is a separate, fundamental violation of TELRIC.

Different placement methods are appropriate for different surfaces. In general, it is far less expensive to lay cable in undeveloped areas than in developed areas. For example, where there is no pavement, a carrier may lay cable by "trenching" or "plowing" through the earth. As the name suggests, "trenching" involves digging a trench, placing the cable directly into it, and then backfilling it; "plowing" involves placing the cable directly into the ground without digging a trench. In denser, more developed areas, by contrast, a carrier must use far more expensive methods of laying cable. "Cut & restore" involves digging up roads, yards, and other surfaces and then restoring them after the cable has been placed. "Directional boring" involves the use of special equipment that literally bores cable through the ground in situations where, for example, cable must pass beneath a road, sidewalk, or yard. Directional boring helps avoid the need to tear up man-made structures. Ex. Qwest-1 (Buckley Dir.) at 11-12.

In adopting the CLECs' position on this issue, the ALJs assumed that trenching and plowing, which are relatively inexpensive, could be extensively used to place cable throughout cities and suburbs. The problem with this assumption is that those areas are largely developed, and one cannot simply "plow" through asphalt. When that limitation is taken into account, the ALJs' trenching and plowing assumptions, combined with the HAI model's cluster data for the Phoenix metropolitan data, imply that more than 50% of the roads in Phoenix are unpaved dirt roads. *See* Ex. AT&T/WorldCom-3 (Denney Dir. Ex. 3–HAI Inputs Portfolio) at 141-42. Anyone who has driven through city centers in Arizona and elsewhere over the past several years has witnessed widespread deployment of underground cable, and such deployment typically involves the more expensive directional boring or "cut and restore" methods of placement.

To get around this problem and reduce costs arbitrarily, the ALJs appear to have relied on two key premises advanced by Staff and the CLECs: (1) that, just as with structure sharing, it is appropriate to travel back in time to pre-development days; and (2) that, even in developed areas, cutting and restoring asphalt and concrete are often unnecessary "because cable is placed in existing underground conduits." R.O.O. 12. Each of these premises is unsound and is a clear violation of TELRIC principles

The first premise, concerning time travel, is flawed for the reasons discussed in Section I(C)(1) above. TELRIC inquires into te costs of replacing the network *today*, not at some time in the past (or future).

The second premise, which relies on "existing" conduits to slash the costs of laying cable, is likewise at war with TELRIC. As a "total element" and "long run" cost methodology, TELRIC asks how much it would cost to replace the entire network. It is not a *short-run* incremental cost methodology that asks how much it would cost to add another increment of capacity to the existing network. *See Local Competition Order*, 11 FCC Rcd. at 15845-46 ¶¶ 677-78. But that is the very approach the CLECs and ALJs have followed here. They rely on Qwest's embedded network to cut or even eliminate the forward-looking costs that, under TELRIC, must be taken fully into account: the costs of placing not just cable itself, but also the conduits through which the cable runs. In the process, the ALJs fail to compensate Qwest for either the historical or the forward-looking costs of these facilities.

In all events, whether one considers a replacement network or the embedded network, firms rarely have the automatic luxury of placing facilities in the ground before obstructions are built. For example, evidence cited by the CLECs' own witness

establishes that Qwest has used directional boring in Arizona for buried placements between 20% and 30% of the time. Ex. AT&T/WorldCom-8 (Weiss Dir.) at 25; Tr. 195, 242 (Buckley Cross, Redir.). In addition, municipalities throughout the country – including, for example, Scottsdale – increasingly require the use of non-invasive placement techniques like directional boring to avoid disruption to roads and other infrastructure. See Tr. at 889-90 (Torrence Sum.).

In sum, the CLEC placement assumptions adopted by the ALJs are irreconcilable with TELRIC, and the Commission should adopt Qwest's more realistic assumptions instead, which are fully consistent with TELRIC. In the alternative, if the Commission is unprepared to adopt those assumptions, it should consider adopting a compromise solution: the average of the Qwest and CLEC proposals.[20] The following observation places that solution in perspective. The CLEC proposal here leads to an average buried placement cost per foot of $2.65, barely half of the $4.95 figure adopted in the previous cost docket. (Because these costs are labor-intensive, the discrepancy obviously cannot be explained by the mere passage of time.) Taking the average of the CLEC and Qwest proposals would lead to an average buried placement cost of $3.63 per foot, roughly midway between the draconian CLEC proposal here and the figure adopted in the preceding cost docket. Ex. Qwest-29 (Fitzsimmons Reb.) at 53-54. That adjustment would recognize additional average per-line investment of $23.00 and increase the costs recovered by the average monthly loop rate by $0.57. See Ex. D.

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[20] See generally KS/OK 271 Order, at ¶ 90 ("we reject the assertions that the ALJ's decision to split the difference between the rates proposed by SBC and AT&T cannot result in rates that are based on TELRIC, and that the ALJ could not pick a rate between the two proposals unless he found that both proposals were appropriately cost based") (footnotes omitted).

D. The ALJs' Proposed 50% Reduction In Qwest's Recovery Of General Support Costs Rests On A Fundamental Accounting Mistake and Violates TELRIC

"General support assets" – such as computers, buildings, motor vehicles, and office equipment – are essential to any carrier's ability to provide both wholesale and retail products. These costs are spread over the entire demand for the relevant products (*i.e.*, products that use the assets in question) and are recovered from all customers, whether wholesale customers paying UNE rates or retail customers paying retail rates, *in proportion to overall demand*. Roughly speaking, if a carrier has ten lines, and if three of them are used by wholesale customers and the other seven by retail customers, charging each of those customers a per-line amount for these general support costs (through either UNE rates or retail rates) will properly allocate recovery of these costs across wholesale and retail customers: 30% for the former, and 70% for the latter.

Nonetheless, in applying a so-called "allocator" in the HAI model, the ALJs have proposed a *further 50% reduction* in the portion of such assets recovered through wholesale UNE rates, reasoning that retail rates would not otherwise bear their fair share of costs. R.O.O. 25-26. This is entirely illogical. Without this further reduction, retail customers would still pay at least their share of these costs through their retail rates.[21]

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[21] The premise of the ALJs' proposed 50% adjustment – a perceived need to exclude retail-related costs from the general support assets allocated to UNEs (R.O.O. 24-25) – is misplaced. Retail-specific costs, such as the costs of marketing, are not included within "general support assets" in the first place. Those assets consist instead of the trucks, computers, office equipment, and so on associated with operating the network used to provide both UNEs and retail services. Moreover, quite apart from application of the "allocator," nothing in the record suggests that the expenditure of one dollar of direct wholesale costs somehow requires less use of general support assets (*e.g.*, trucks and computers) than the expenditure of one dollar of direct retail costs. Finally, as discussed in the text, the HAI model permits recovery of general support costs through UNE rates

But when a retail customer chooses a CLEC as its provider, it no longer pays retail rates to Qwest, and it therefore no longer pays the portion of the retail rate designed to recover the costs of general support assets. That portion of the costs of general support assets then shifts to the purchaser of the line: the CLEC.

It therefore makes no sense whatsoever to cut in half the portion of these costs recovered through UNEs on the theory that the omitted portion somehow represents "clearly retail expenses" (R.O.O. 25). To the contrary, these remain the general support costs that *would* be recovered through retail rates if Qwest had retained the retail customer, but that are *not* recovered at all through such rates once Qwest *loses* the retail customer. Put differently, if 80% of Qwest lines are used by retail customers and the other 20% of those lines are leased as UNEs by CLECs, Qwest is still entitled to recover 100% of the general support costs that have been distributed over all those lines: 80% through retail rates, and 20% through UNE rates. Under the ALJs' approach, by contrast, Qwest would be entitled to recover only 10% through UNE rates; unless the shortfall is shifted to retail customers, Qwest is left with only 90% cost recovery.

It is unsurprising that the ALJs committed this double-exclusion error, because the documentation that accompanies the HAI model is wholly uninformative about the purpose and effect of the "allocator." Nonetheless, the mistake requires correction, which would permit the recovery through the average monthly rate of an additional $1.04 in costs. *See* Ex. D.

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only in proportion to the number of lines actually leased as UNEs: *i.e.*, the rate for a loop is the same whether CLECs lease one or one million.

II. The ALJs' Treatment Of Non-Recurring Costs Violates TELRIC And Would Deny Qwest Any Meaningful Compensation For The Substantial Costs Incurred In Making Its Network Elements Available To Competitors

Nonrecurring costs are the one-time costs an ILEC incurs when providing a UNE to a CLEC or establishing service for a retail customer. On the wholesale side, Qwest typically incurs such costs when making various network elements available to a CLEC that wishes to use those elements to provide competing services: these are the real and unavoidable costs of, for example, processing and executing a CLEC order to connect a stand-alone loop (unbundled from switching) to the CLEC's collocated facilities or to provide the UNE platform to new customers over lines not currently in use. ILECs are appropriately entitled to recover the costs of such activities from CLECs up front, through a one-time nonrecurring charge at the time the activities are performed.[22]

As discussed, TELRIC requires consideration of what it would cost an efficient carrier *today* to replace the existing network and perform efficient network functions. In some contexts, as with cable placement costs and structure sharing, the ALJs violate that standard by considering what it would have cost *years ago* to conduct certain tasks necessary to replace network facilities. When it comes to nonrecurring charges, however, the ALJs err in precisely the opposite direction. By "adopt[ing]" the "CLEC-sponsored NRC model" (R.O.O. 32), the ALJs base all of their nonrecurring charge recommendations *not* on any inquiry into the costs an efficient carrier would incur today,

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[22] *See, e.g.,* Second Report and Order, *In the Matter of Local Exchange Carriers' Rates, Terms, and Conditions for Expanded Interconnection Through Physical Collocation for Special Access and Switched Transport,* 12 FCC Rcd. 18730 ¶ 33 (1997) ("1997 Expanded Interconnection Order"). If the ILEC were required to recover those up-front costs only over time as part of the monthly loop rate, it might well never receive full compensation, because the CLEC may lose the customer, or stop providing service, before it has paid off the costs it has caused. Ex. Qwest-18 (Million Reb.) at 49-50.

but on speculation about the costs that carrier might incur *years from now*, if and when someone invents the technology that enables ILECs and CLECs to work out complex network coordination problems with little or no human intervention.

This mode of predictive future analysis bears no resemblance to TELRIC. As the FCC has explained, the forward-looking cost inquiry mandated by TELRIC is confined to the cost of "currently available" technology," 47 C.F.R. § 51.505(b)(1), and it is designed to produce wholesale prices that "most closely represent[] the incremental costs that incumbents *actually expect to incur* in making network elements available to new entrants." *Local Competition Order*, 11 FCC Rcd. at 15849 ¶ 685 (emphasis added).[23] And, as the CLECs' own witness conceded in this proceeding, the nearly flawless automation assumed by the ALJs' nonrecurring cost model is nowhere "currently available." Tr. 1511 (Weiss Cross.). For that and similar reasons, the ALJs' model produces nonrecurring costs dramatically below what TELRIC requires.

Indeed, the rate levels that emerge from the ALJs' science fiction exercise would be a tiny fraction of the existing rate levels in Arizona, a tiny fraction of the rate levels proposed by the Commission Staff in this proceeding as well, and orders of magnitude below those in effect in other states. At the same time, the ALJs provide no recommendation at all on a variety of nonrecurring charges, and this Commission must now fill the gaps with compensatory rates. Because the ALJs simply misunderstood the methodological question before them, Commission should reject their recommendation

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[23] Similarly, as AT&T recently told the Supreme Court, "TELRIC simply was not intended to do anything other than measure a LEC's costs of providing its 'actual facilities.'" Br. of Petitioner AT&T Corp., *AT&T Corp. v. Iowa Utils. Bd.*, No. 00-590 (and consolidated cases), at 28 (S. Ct. filed Apr. 9, 2001).

and adopt charges similar to those proposed by Qwest (*see* Exhibit G) and, at a minimum, use the Staff's proposals in this proceeding as a price floor for the nonrecurring costs that Staff addresses.

A. **The ALJs' Nonrecurring Charge Recommendations Rest On Fanciful Assumptions About The Extent To Which Network-Provisioning Orders Can Be Mechanized.**

The premise of the ALJ-adopted nonrecurring cost model is that – despite numerous, inevitable ordering errors by CLECs, and despite the 24% of orders that are faxed by CLECs – an efficient ILEC can be expected (1) to process all CLEC UNE orders without human intervention an astonishing 98% of the time and (2) to execute those orders in the network with only the most limited manual labor. Ex-AT&T RL-3, NRCM Version 2.2 Inputs Tab. Each half of that premise is wholly fictitious; this section addresses the first half, and the next section addresses the second half.

As the CLECs' witness agreed on cross-examination, Qwest is "absolutely right" to observe that no carrier today, anywhere in the United States, has order-processing systems that could possibly meet this "flow-through" standard. Tr. 1511 (Weiss Cross). That, indeed, is an understatement. The FCC recently lauded SBC's recent 80% to 83% flow-through accomplishment in Missouri and Arkansas, *Ark/MO 271 Order* ¶ 42, and just three months ago the Commission accepted, for section 271 purposes, flow-through rates for Verizon in Pennsylvania ranging from 54% to 66.5%.[24] All of those FCC-

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[24] *Application of Verizon Pennsylvania Inc., et al. for Authorization to Provide In-Region, InterLATA Services in Pennsylvania*, CC Docket No. 01-138, Memorandum Opinion and Order, FCC 01-269 at ¶ 49 (rel. Sept. 19, 2001).

approved numbers fall below the quite generous 85% flow-through assumption that

Qwest uses in its own nonrecurring cost model.[25]

The CLEC witness called to defend the 98% standard nonetheless sought to

justify that number on the curious theory that some carriers "are working toward it." Tr.

1511 (Weiss Cross). Later, he was clearer still, emphasizing that present capabilities

using today's technology are, in effect, irrelevant because *"right now is not a forward-*

looking time." Id. at 1566 (emphasis added). Similarly, in adopting the CLECs' model,

the ALJs expressed their belief that it "recognizes the efficiencies that *will occur* in a

forward-looking network." R.O.O. 32 (emphasis added). In each case, the choice of

language is telling. The ALJs had no basis for believing, because there *is* no such basis

in the record, that such idealized "efficiencies" are available today to anyone. Instead,

they adopted the CLEC model because they believed such efficiencies "will" someday be

available "in a forward-looking network" (*id.* at 32), by which they meant a *future*

network. In so doing, they were simply following the lead of the CLEC witness who

insisted, in support of this model, that "right now is not a forward-looking time." Tr.

1566 (Weiss Cross.).

For example, the model altogether excludes costs associated with Qwest's

Interconnect Service Center ("ISC"), the critical wholesale service facility where CLEC

orders are processed and where CLECs call with questions about Qwest's wholesale

product offerings. Tr. 1561-64 (Weiss Cross.). These are the real costs that Qwest does

incur, and any carrier must incur, to provide service to wholesale customers today.

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[25] This 85% figure reflects Qwest's and AT&T's agreement on PO-2B: that Qwest will achieve an 85% flow-through rate by 2003. (See Qwest's position on PO-2B benchmark impasse served on Regional Oversight Committee distribution list, November 2, 2001.)

Although the ISC's involvement is necessary to ensure the accurate placement of a wide range of UNE-related orders, such involvement is particularly critical with respect to certain UNEs, such as DS1 and DS3 loops: as to those elements, the "activities associated with placing orders and coordinating with the CLECs are too complex to be performed in a mechanized fashion at this time." Ex. Qwest-18 (Million Rebut.) at 47. As the FCC has explained, TELRIC is designed to produce prices that "most closely represent the incremental costs that incumbents *actually expect to incur* in making network elements available to new entrants." *Local Competition Order*, 11 FCC Rcd. at 15849 ¶ 685 (emphasis added). The ALJs' proposal would violate that mandate and, in practical terms, would require Qwest to incur very significant costs to help out its competitors and then receive no compensation in return.

By itself, the unavailability today of flawless order-processing technology is more than reason enough to reject the ALJs' nonrecurring cost recommendations. Moreover, even if such technology *were* available today, the ALJs' proposal to assume away the costs of human intervention would be flawed for an independent reason as well. A separate assumption underlying that proposal is that, if human intervention is needed to process a CLEC's order, that need is necessarily attributable to Qwest rather than the CLEC. That assumption is quite false. Much of this human involvement is necessary simply to process the 24% of orders that CLECs choose to submit by fax rather than electronically. Ex. Qwest-18 (Million Rebut.) at 47. And even those CLECs that do submit electronic orders often do so inaccurately, requiring the intervention of a Qwest customer service representative to communicate with the CLEC and set the order straight.

Id. Again, it would be unlawful both to expect Qwest to perform that service and to pretend, for cost-recovery purposes, that Qwest has performed no service at all.

Finally, even if futuristic speculation were appropriate in this setting, there is no reason to expect that *any* carrier will *ever* come close to achieving the 98% flow-through presupposed by the ALJs' nonrecurring cost model. That model assumes future systems, operated by perfect CLEC personnel, that eliminate any need for a carrier to have any employees to process wholesale orders. That is neither this world nor any future world.

B.   The ALJs' Nonrecurring Cost Recommendations Assume Away Unavoidable Network Provisioning Tasks.

To the extent that the ALJs' nonrecurring cost model recognizes the need for any manual installation activity once an order *is* processed, it grossly underestimates the amount of work required.

A simple but important example illustrates the point. As discussed above, CLECs may place several different kinds of orders for stand-alone loops: to avoid service disruptions to a customer currently served by a particular loop, the CLEC may order a "coordinated" loop cutover, or "hot cut," with or without line testing by Qwest; in contrast, if service disruption is not a concern and the cutover may proceed on a flexible schedule, the CLEC may simply order a "basic" (*i.e.,* non-coordinated) loop installation. Because the ALJs appear to have omitted any recommendation for hot cuts, the discussion below focuses on the nonrecurring charge they have recommended for a basic loop installation. That service, although not as labor-intensive as hot cuts, involves significant work by Qwest. After coordinating with the CLEC, Qwest must identify the relevant loop, disconnect it from its own network at the central office distribution frame, and then connect it to the CLEC's switch, typically by running a jumper cable to a tie pair

connected to the CLEC's collocation equipment. That process involves a number of discrete labor-intensive steps, from coordinating the specifics of an order to dispatching a technician to the frame to identify the relevant connections, execute the loop cutover, conduct any necessary testing, and report the results in Qwest's systems, all under the oversight of a Qwest supervisor whose job is to ensure smooth wholesale performance for CLECs.

For comparison purposes, it is instructive to survey the non-recurring charges proposed or ordered in various jurisdictions for the basic loop installation.[26] In Arizona today, the ordered rates are $40.92 for residential customers and $45.92 for business customers; those rates are currently on remand from the district court, which agreed with Qwest's claim that, because they are based on retail rates, they are insufficiently cost-based.[27] Similarly, the charges in Washington and Montana are, respectively, $51.94 and $89.88, and, after an exhaustive evidentiary hearing, the Colorado commission recently announced that it would set the charge at $87.74.[28] And, with the FCC's endorsement, the Oklahoma commission has set the charge at more than $60.00. *KS/OK 271 Order* at ¶¶ 97-98.

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[26] These and other rate figures are set forth in Exhibit F. Although Staff did not propose a rate for basic installation, it did propose hot cut rates of $58.18 (without testing) and $141.67 (with testing).

[27] *US West Communications, Inc. v. Jennings*, No. CV 97-26-PHX-RGS-OMP (and consolidated cases), at 13-14 (May 5, 1999).

[28] That announcement was made during an open meeting of the Colorado commission on November 13, 2001. Qwest will submit that commission's formal pricing order once it has been issued. The current basic loop installation charges in Colorado are $70.00 for the first loop and $40.00 for each additional loop. *See* Ex. F.

Those figures establish a backdrop against which the Commission should judge the ALJs' rate proposal for the same function – and for the ALJs' recommendations on nonrecurring charges in general. With little analysis, the ALJs simply "adopt[ed] the CLEC model in this proceeding" (R.O.O. 32), and that model generates a nonrecurring charge of $1.70 for a basic loop installation. Ex. AT&T/WorldCom MH-1 at 12. In a word, that recommendation is absurd, as confirmed by decisions of other state commissions. That charge would need to be multiplied by a factor of more than 50 to reach the Colorado commission's recently adopted charge of $87.74, for example. Technician labor is presumably not 50 times more expensive in Colorado than in Arizona. In particular, technicians in Arizona do not work, in effect, for free.

These numbers speak volumes about the world that the ALJ-endorsed model envisions. It is a world in which, when a customer signs up with a CLEC and the CLEC orders a stand-alone loop from Qwest, no technician needs to do any work at Qwest's distribution frame, because the signal coming from the loop will stop short of Qwest's switch and pass magically through the air en route to the CLEC collocation space elsewhere in the central office. *See also* Qwest Post-Hearing Br. 78-80 (explaining how CLEC nonrecurring cost model rests on untenable assumptions concerning dedicated outside plant and the amount of manual labor needed to run a cross-connect in conjunction with terminating GR303 IDLC). Nor is the ALJs' recommendation on this particular nonrecurring charge unrepresentative of their recommendations for other nonrecurring charges. As shown in Exhibit F, the ALJs' proposals for those other charges, such as the rates for the highly labor-intensive provisioning of high-capacity DS1 circuits, are also miniscule when compared to the TELRIC-based charges in effect

in other jurisdictions. These comparisons indicate that the ALJs' nonrecurring cost analysis has nothing to do with TELRIC and everything to do with subsidizing competitive entry.

The CLECs obscure suggestion that *some* network labor costs should be recognized but recovered through monthly recurring charges rather than through up-front nonrecurring charges is irrelevant and misleading. Nowhere do the CLECs explain or demonstrate *how* these costs are to be recovered through the recurring charges they proposed and the ALJs recommend, apart from vague and conclusory suggestions that these costs are reflected in "the factors" used in the HAI recurring cost model for all lines, whether wholesale or retail. Ex. Qwest-18 (Million Rebut.) at 49-50. Indeed, the noncompensatory monthly loop rate produced by the ALJs' application of the HAI model (*see* Section I, *supra*) appears to foreclose even the theoretical possibility that one-time costs typically recovered through nonrecurring charges have also been included.

In all events, it would be inappropriate to limit recovery of nonrecurring costs to monthly recurring charges, spread over 10-20 years and over all wholesale and retail lines, given the absence of any assurance that CLECs will actually serve the relevant customers, and pay these monthly charges, long enough to cover the nonrecurring costs. As the FCC has explained in an analogous context, "[t]o the extent that the equipment needed for expanded interconnection service is dedicated to a particular interconnector, we believe that requiring that interconnector to pay the full cost of the equipment up front is reasonable because LECs should not be forced to underwrite the risk of investing in

equipment dedicated to the interconnector's use, regardless of whether the equipment is reusable."[29]

C. The ALJs' Recommendation On Nonrecurring Costs Is Incomplete

In addition to generating blatantly noncompensatory rates for the nonrecurring costs that it *does* address, the CLEC-sponsored cost model adopted by the ALJs altogether ignores many categories of cost-intensive activities for which nonrecurring charges need to be set. *See* Ex. Qwest-18 (Million Reb.) at 54. Although the opacity of the model itself and its supporting materials makes it difficult to say exactly what it does and does not cover, the model plainly omits rates for such key items as high-capacity dedicated interoffice transport and dark fiber.

Likewise, the model appears to ignore the very substantial nonrecurring costs associated with "hot cuts" for any kind of stand-alone loop, be it a DS0, a DS1, or a DS3. As noted, when a CLEC wins the business of an existing Qwest customer, that customer might well be concerned about any lengthy interruption in its telephone service during the transition: *i.e.*, between the time the loop is disconnected from Qwest's switch (at the central office distribution frame) and successfully connected to the CLEC's switch (generally through the CLEC's collocation space in the central office). To avoid such an interruption, the CLEC and Qwest must closely coordinate, in real time, a number of

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[29] *1997 Expanded Interconnection Order* at ¶ 33 (emphasis added); *see also Local Competition Order*, 11 FCC Rcd. at 15875-76 ¶ 749 ("states may, but need not require incumbent LECs . . . to recover nonrecurring costs . . . through recurring charges over a reasonable period of time. . . . At the same time, any such reasonable arrangement *would ensure that incumbent LECs are fully compensated for their nonrecurring costs*") (emphasis added). Paradoxically, in other contexts, the ALJs criticize Qwest's cost-recovery efforts on the bizarre theory that there is something anticompetitive about recovering nonrecurring costs through monthly charges spaced out over time. R.O.O. 54.

special, labor-intensive tasks necessary to coordinate an expeditious loop cutover (or "hot cut") and, if requested by the CLEC, to test the effectiveness of that cutover; in some cases, Qwest must dispatch technicians not just to the frame, but also to the field. For these reasons, the nonrecurring charges imposed for hot cuts are typically higher than those for a "basic" (uncoordinated) loop installation, even though the latter function involves significant manual activity as well. Indeed, in this proceeding, Staff proposed rates of $58.16 for hot cuts of DS0 lines without testing and $141.67 for such hot cuts ordered with testing. During the course of discussions on the compliance filing, AT&T has assumed that the ALJs meant to include "hot cuts" within the $1.70 nonrecurring charge proposed for basic loop installation. That assumption is preposterous, and if that is what the ALJs intended, it is manifest legal error, given (among other things) the evidence of the additional, substantial costs incurred in performing hot cuts.

Similarly, although the ALJs may have sought to address the nonrecurring charge for provisioning the UNE platform for a CLEC customer over a line *not currently in use,* their two-sentence analysis of that issue is so confusing that it is impossible to discern what, if anything, they have recommended. *See* R.O.O. 61.[30] In those two sentences, the ALJs simultaneously (1) encourage "negotiations" on all "UNE-P issues"; (2) observe that the *recurring* rate for the platform is the sum of the recurring "rates the Commission

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[30] The UNE platform, or "UNE-P," is the combination of all UNEs necessary to provide service to an end user. The nonrecurring costs at issue here – those incurred in providing the substantial network operations often necessary to provide the UNE-P to an end user over a line that is *not* currently in use – should be distinguished from the mere "conversion" of a customer's *existing* Qwest service to a CLEC through the platform. All parties agree that, because simple *conversions* involve no network operations and little or no manual intervention, the nonrecurring charge associated with that function is appropriately set at less than a dollar. But that is not the much more labor-intensive function described in the text, which the ALJs apparently overlooked.

has established for the various UNE-P functions"; and then (3) "adopt Staff's position on this issue" without indicating what "this issue" is. In short, the ALJs have provided no apparent recommendation on an appropriate *nonrecurring* charge for the substantial costs incurred in provisioning the platform over a line not in use.

A preliminary list of the model's apparent omissions is set forth at Exhibit G.[31] Because the ALJs addressed nonrecurring charges simply by "adopt[ing] the CLEC model" without further analysis (R.O.O. 32), their recommendation is silent as to nonrecurring charges proposed by Qwest but not addressed by that model. Such omissions are unjustifiable. *See generally* 47 U.S.C. § 252(b)(4)(B). The Commission could have focused its attention on these omissions if the ALJs had issued plausible recommendations on the nonrecurring charges that they did address. But, as discussed above, the ALJs' proposals on those other charges are themselves untenable, because they rest on inappropriate assumptions about supposed *future* technological advances, not on any inquiry into the forward-looking costs of *today's* network capabilities. As a result, both as to the nonrecurring charges that the ALJs did address and as to the many they did not, this Commission should undertake an appropriate forward-looking analysis in the first instance. Qwest's recommendations for those charges is set forth in Exhibit G, and its analysis supporting those recommendations appears in its post-hearing brief (at 70-80) and reply brief (at 29-33). The Commission should adopt those rates and, at a minimum, view Staff's recommendations as an absolute floor with respect to the rates that Staff addressed. See Exhibit G.

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[31] Qwest has expressly reserved its right to comment further on issues arising from the parties' submission of the compliance filing or from subsequent procedural or substantive rulings by the ALJs in this docket.

III. **The ALJ Recommendation Concerning "Campus Wire" Is Outside The Scope Of This Proceeding, Lacks Any Basis In The Record, And Would Require A Corresponding Increase In Subloop Rates Generally**

"Campus wire" consists of the outside distribution lines that serve multiple buildings on a single property, such as an apartment complex or a college campus. These facilities are currently, and properly, treated as a category of subloop distribution plant. *See* Qwest Post-Hearing Reply Br. 34-35; Fleming Reb. at 101-102. Indeed, the ALJ-adopted HAI cost model includes campus wire within the distribution subloop UNE, and it blends the cost of that campus wire, along with non-campus distribution facilities, into the forward-looking cost of the subloop generally. *See* Fleming Reb. at 103-04; Tr. 495-99 (Fleming Cross).

Without any basis in the record, the ALJs accepted Cox's argument that campus wire should be treated not as it is now treated, as part of the subloop, but as part of a brand new, less expensive UNE called "on-premises wire," which would also include intrabuilding cable (*i.e.*, Qwest-owned wire in a multi-tenant building) and would be priced at the same rate as the intrabuilding cable. R.O.O. 58. That recommendation is unsound on both procedural and substantive levels. *First*, the purpose of this cost docket is to *price the elements currently in Qwest's SGAT*, not to create brand new UNEs that Qwest has had no opportunity to price. *Second*, because there was no notice that the ALJs were contemplating the creation of this novel UNE, there is no evidence in the record for the proposition that the costs of campus wiring are at all similar to the costs of intrabuilding cable.

Finally, if (as the ALJs seem to believe) the cost of campus wire is lower than the cost of the rest of the subloop UNE to which it now belongs, the inevitable conclusion is

that the cost figure for that UNE is lower than it would be if campus wire were removed

from the scope of that UNE and if its supposedly low cost were therefore no longer

blended into the cost of the subloop generally. For that reason, the Commission could

not logically or lawfully sever campus wire from the subloop UNE without raising the

rate for all *remaining* facilities within that UNE, such as those serving single-family

dwellings. Similarly, if the cost of campus wire is greater than the cost of intrabuilding

cable, combining the two within a single UNE would require an increase in the rate for

the latter.

CONCLUSION

The ALJs' methodological mistakes are inconsistent not just with TELRIC, but

with one another; the only common denominator is that each such mistake operates to

deny Qwest compensation for the forward-looking costs of its network. As discussed

above, the Commission should correct those errors and (1) adopt an average recurring

loop rate in the neighborhood of $19.00, (2) adopt the nonrecurring charges proposed by

Qwest and, at a minimum, proposed by the Staff in this proceeding, and (3) reject the

ALJs' unsupported recommendation for a new "campus wire" (or "on-premises wire")

rate.

Respectfully submitted this 12th day of December, 2001.

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